

REMARKS

The Office Action of February 9, 2006 has been received and its contents carefully considered.

The present Amendment revises claims 1 and 6 in order to correct inadvertent informalities. A formatting error in claim 2 has also been corrected, but this correction is not shown on the preceding pages because no modifications have been made in the text itself.

Claim 1 is the sole independent claim in this application. It has been rejected for obviousness, in section 1 of the Office Action, on the basis of patent 6,101,266 to Laskowski et al in view of patent 5,512,758 to Kobayashi et al. It has also been rejected for obviousness, in section 3 of the Office Action, based on patent 6,731,785 to Mennie et al in view of Kobayashi et al. For the sake of convenience, these references will hereafter be called simply “Laskowski,” “Kobayashi,” and “Mennie.” The rejection of claim 1 is respectfully traversed, as will be discussed below.

Claim 1 provides that a transmitter holder base has a detection side and that a receiver holder base likewise has a detection side. A banknote passage is defined between the detection sides of the transmitter holder base and the receiver holder base. Claim 1 then recites “an optical transmitter module mounted in the detection side of said transmitter holder base, said optical transmitter module comprising at least one ultraviolet light emitting diode adapted to emit ultraviolet light onto a first side of [a] banknote as the banknote passes through said banknote passage,” and “an optical receiver module mounted in the detection side of said receiver holder base, said optical receiver module comprising at least one phototransistor adapted to receive light from a second side of the

banknote as the banknote passes through said banknote passage ... ”. In other words, claim 1 provides that a banknote passage is defined between a transmitter holder base and a receiver holder base. At least one ultraviolet LED is mounted on the transmitter holder base and at least one phototransistor is mounted on the receiver holder base. The light source and light detector are therefore on opposite sides of the banknote passage and are mounted on elements that define the banknote passage (that is, the transmitter holder base and the receiver holder base).

It is respectfully submitted that an ordinarily skilled person would not have had an incentive to combine the Laskowski and Kobayashi references. One reason is that Kobayashi teaches the use of a glass block (see the abstract of the reference) when ultraviolet light is used. An ordinarily skilled person would likely conclude that the glass block 40 in Kobayashi’s Figure 12 would enlarge the banknote passage as defined in claim 1, and this would be undesirable.

Another reason is that Laskowski teaches light emitters that span the visible range and infrared (column 6 of Laskowski, lines 34-46), which would be inconsistent with the UV filter 19 that Kobayashi uses in his Figure 12.

It is also respectfully submitted that an ordinarily skilled person would not have had an incentive to combine the teachings of Mennie and Kobayashi. Mennie teaches the use of infrared light to detect counterfeits. Why would an ordinarily skilled person who wanted to improve Mennie’s system in some way reject Mennie’s primary teaching and switch to ultraviolet light in accordance with Kobayashi?

Even part from this consideration, it seems likely that an ordinarily skilled person would conclude that Kobayashi’s teaching of a glass block 40 (in conjunction with his

UV source 2) would enlarge a banknote passage between a transmitter holder base and a receiver holder base and that this would be undesirable.

The Office Action takes the position that an ordinarily skilled person would have been motivated to combine Kobayashi with the other references in order to determine the thickness and material dirtiness of a bill. But Kobayashi's "examined object" is not necessarily a bill. It could be some other type of document, such as a security document (see column 1, lines 14-17). Why would an ordinarily skilled person be concerned with detecting the thickness of a bill? An ordinarily skilled person would likely suspect that the thickness of a bill might vary widely due to wear and moisture. Thickness would therefore not be a very reliable guide to genuineness, except possibly in situations where the thickness of a bogus bill deviates so much from the norm for genuine bills that detecting a counterfeit bill should not require the use of electrical equipment anyway. As for material dirtiness, it is well-known that a genuine bill can be quite dirty. An ordinarily skilled person would therefore have no reason to use material dirtiness as a criteria for ascertaining whether a bill is genuine.

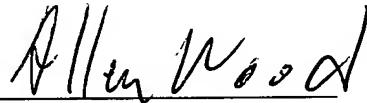
It is respectfully submitted that the rationale advanced in the Office Action for combining the references is far overshadowed by the reasons, discussed above, why an ordinarily skilled person would receive a contrary motivation. It is difficult to escape the conclusion that the rejections rest on no more than a hindsight reconstruction of the invention based on features extracted from the prior art using the present invention as a guide.

It is therefore respectfully submitted that claim 1 is patentable over the cited references. Since the remaining claims depend from claim 1 and recite additional

limitations to further define the invention, they are also patentable and need not be further discussed.

For the foregoing reasons, it is respectfully submitted that this application is in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,



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